

AN 1986:410444 HCAPLUS
 DN 105:10444
 TI **Magnesium** alloys for die-casting
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 SO Jpn. Kokai Tokkyo Koho, 3 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61003863	A2	19860109	JP 1984-121901	19840615
	JP 03017890	B4	19910311		
PRAI	JP 1984-121901		19840615		

AB The **Mg** alloys contain **Ca** 0.2-4, **Al** 1-6, **Si** 0.5-1.5, **Mn** 0.15-0.5, **Zn** ≤ 0.3 , **Cu** ≤ 0.06 , **Ni** ≤ 0.03 , and impurities $\leq 0.3\%$. Addition of **Ca** to **Mg**-base alloy containing **Si** $\geq 0.5\%$ increases the creep-rupture resistance. Thus, die-cast **Mg** alloy (containing **Ca** 0.52, **Al** 3.9-4.2, **Si** 0.8-1.3, and **Mn** 0.24-0.28%) showed tensile strength 21.8 kg/mm² and elongation 8.0%. The rupture time was 3.7 h with elongation 11.3% in creep-rupture tests at 250° with tensile stress 5.5 kg/mm².

1-6 Al

0.2-4 Ca

0.5-1.5 Si

Zn

Mg